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Europäisches Patentamt  
European Patent Office  
Office européen des brevets

(11) Publication number:

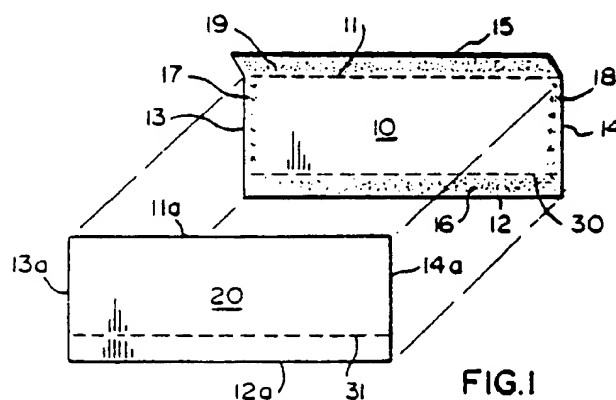
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## EUROPEAN PATENT APPLICATION

(21) Application number: **87306822.5**(51) Int. Cl.4: **B65D 27/04 , B65D 27/14**(22) Date of filing: **31.07.87**(30) Priority: **14.08.86 CA 515932**(43) Date of publication of application:  
**24.02.88 Bulletin 88/08**(64) Designated Contracting States:  
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**Croydon Surrey CR0 4SD(GB)**(54) **Sealable envelopes.**

(57) An envelope suitable for use in automatic teller machines is composed of two separate sheets of material forming a rectangular front panel 10 and a rectangular back panel 20 respectively. The front panel 10 and back panel 20 are adhesively secured along three marginal edges 12,13,14 and a closure flap 15 extends from the front panel 10 along its unsecured edge 11. The surface of the closure flap facing the back panel carries an adhesive substance 16 whereby the closure flap may be folded along the said unsecured edge 11 over the back panel 20 and secured thereto to close and seal the envelope. The material of one of the panels is a translucent paper receptive to conventional printing processes and adapted to permit visual inspection of the envelope contents when the envelope is sealed.



**FIG.1**

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This application relates to sealable envelopes and particularly envelopes suitable for use in automatic teller machines.

It is conventional to provide an envelope bin in conjunction with automatic teller machines for the use of customers who are making deposits, paying bills or the like by means of the machine. For such transactions the machine issues a transaction card which is inserted in an envelope along with the deposit or the bill being paid, and the envelope is then sealed and inserted into the machine. To date, these envelopes have been of conventional construction. However, the extensive use of automatic teller machines has given rise to an entirely new set of problems which were not previously encountered with the use of human tellers. For example, some jurisdictions require that any automatic teller envelopes containing cash must be opened in the presence of two bank employees. Accordingly, if it is not possible to readily determine which envelopes contain cash, all envelopes must be opened in the presence of two employees.

A more serious problem arises when the envelopes contain nothing at all, or only a transaction card with no accompanying material. If this occurs merely because of a recognised error on the part of the customer, it may merely constitute a nuisance insofar as the bank is concerned. However, if some or all of the contents have inadvertently been omitted by a customer who believes that they have in fact been inserted, or the contents are intentionally omitted by the customer, the consequences are considerably more serious.

By way of example, assume a customer intends to make a cash deposit and manipulates the automatic teller machine accordingly. The machine will issue the customer with a document which the customer is to insert in an envelope along with the cash amount of his deposit and which indicates the nature of the transaction and amount. The customer then seals the envelope and inserts it into the automatic teller machine, and shortly thereafter receives a confirmation document describing the nature and amount of the transaction for the customer's own record. However, if the customer inadvertently or intentionally seals the transaction card in the envelope without inserting the cash deposit the bank employees will, when they eventually open the envelope, find only the transaction document and no deposit money. It will therefore be necessary for the bank to contact the customer and advise of the deficiency. If the customer is convinced that he has inserted the deposit money in the envelope along with the transaction document, he may take the position that the money has been misplaced or even stolen by the bank employees. Similarly, if the customer intentionally omitted the deposit money from the envelope, he

may take a similar position in the hope that the bank will credit him with the deposit in order to avoid the investigation which would no doubt ensue if the customer maintained his position that the money had been either misplaced or stolen by the bank employees. Once the envelope is open, it may be rather difficult for the bank to satisfy the customer, or other authorities, that the envelope failed to contain the deposit monies.

The foregoing, and related problems can be substantially eliminated through the use of an envelope wherein at least one complete side is transparent or translucent. Accordingly the invention resides in an envelope comprising a rectangular front panel composed of one sheet of material and a rectangular back panel composed of a second sheet of material, and co-extensive with said front panel, the two panels being adhesively secured together along three marginal edges. At least one of the panels is composed of a translucent paper material adapted to permit visual inspection of the envelope contents when sealed by means of an adhesive bearing closure flap extending from the front panel along the unsecured edge thereof. Preferably the translucent paper material is receptive to conventional printing processes.

With such an envelope, the contents can be inspected without opening the envelope. In this way, envelopes containing cash can be set aside to be opened before two bank employees, whereas all of the remaining envelopes can be opened by a single employee. Further, when an envelope contains nothing, or nothing but a transaction document, this can be readily ascertained by means of the translucent panel and the customer responsible for inserting the envelope into the automatic teller machine may be confronted before the envelope is opened, so that it will be apparent that the contents could not have been misplaced or stolen by the bank employees. All envelopes inserted into the automatic teller machines are imprinted with means for identifying the customer utilizing the machine for that particular transaction, with the result that it is a relatively simple matter to identify the customer without opening the envelope.

While it is known to provide envelopes with relatively small translucent or transparent windows or panels in one surface thereof, such envelopes would not be particularly suitable for the purpose, as the automatic teller machine envelopes are relatively large, and contents may be inserted in such a way that they would not be visible through such window. By producing envelopes from separate sheets of material, it is possible to make the entire front panel, back panel, or indeed both, of transparent or translucent material, thus eliminating problems of the foregoing type in a very simple and inexpensive manner.

In drawings which illustrate embodiments of the invention.

Figure 1 is an exploded perspective view of components of an envelope in accordance with the invention showing front and back panels prior to assembly;

Figure 2 is a back view of the assembled envelope of Figure 1 with the closure flap unsealed;

Figure 3 is a front view of the envelope of Figure 2;

Figure 4 is a side view of the envelope of Figure 3; and

Figure 5 is a back view of a different form of envelope embodying the invention.

Referring now to Figure 1, the envelope is composed of a front panel 10 having top edge 11 defined by a line of perforations, bottom edge 12, side edges 13 and 14, and a closure flap 15 extending from the top edge 11. The front panel 10 is provided with a solid adhesive or glue line 16 along bottom edge 12, and interrupted lines of adhesive or glue 17 and 18 along side edges 13 and 14 respectively. The surface of closure flap 15 carries adhesive or glue 19 whereby the finished envelope may be sealed. The adhesive or glue 16, 17, 18 and 19 may be of any suitable type as is well known in the art.

Back panel 20 has a top edge 11a, a bottom edge 12a, and two side edges 13a and 14a co-extensive with top edge 11, bottom edge 12, and side edges 13 and 14 respectively of front panel 10. The back panel and front panel are assembled by superimposing the back panel on the adhesive bearing side of the front panel and solidly gluing the panels along the bottom and spot gluing them along the sides. Figures 2, 3 and 4 show the assembled envelope with adhesive lines 16, 17 and 18 being emphasized for illustrative purposes. It will be apparent that the envelope may be sealed by means of the adhesive 19 on the closure flap 15 which is folded about top edge 11 to overlie the back panel 20 against which it is pressed to close and seal the envelope.

Both the front panel and the back panel carry perforated lines of separation 30 and 31 respectively which are in alignment and located inboard of the line of adhesive 16 so that the envelope may be opened simply by tearing off the strip containing the adhesive line 16 along lines of perforation 30 and 31.

In an alternative embodiment (not illustrated) lines of perforation 30 and 31 may be displaced slightly to create an extended portion of one of the panels after the adhesive bearing strip is removed so that one of the panels may be more readily grasped to open the envelope and remove the contents. Where the envelopes are to be opened

with an automatic letter opener, these perforations may be dispensed with. Spot gluing is employed along side edges 13 and 14 to facilitate complete separation of one panel from the other after the bottom glue strip is removed, and top edge 11 is defined by a line of perforations to further facilitate opening of the envelope, or complete separation of the front panel from the rear panel.

In the illustrated embodiment, back panel 20 is formed of a sheet of transparent or translucent paper material, by which is meant the material is adapted to permit the contents of the envelope to be viewed without opening the envelope. It is not necessary that the paper be absolutely transparent. It is only necessary that the paper be sufficiently transparent or translucent to permit visual inspection of the contents. Preferably, the material is receptive to conventional printing processes, so that instructions and information may be readily imprinted thereon. Material particularly suitable for the purposes of this invention is known as 30 Bleached Foil, available from E.B. Eddy. This material is particularly advantageous because it is capable of retaining fingerprints and therefore provides an additional measure of security when used in the production of envelopes of the kind employed in banking or similar operations. It will be appreciated that the front panel, as opposed to the rear panel, could be formed of such material, or that both panels could be formed of such material so that the contents of the envelope could be readily viewed from either side.

The envelope designated generally as 50 in Figure 5 is essentially the same as the envelope depicted in Figures 1 through 4, except that the closure flap 40 extends from a short edge of the front panel solid glue line 51 (which is emphasized for illustrative purposes) extends along the other short side, spot glue lines 52 and 53 (emphasized for illustrative purposes) extend along the long sides, and the panels do not employ perforated lines of separation comparable to those at 30 and 31 in Figures 1 through 4. As in the case of the other embodiment, either the front panel, the back panel, or both may be of transparent or translucent material.

It will be appreciated that the foregoing illustrations are given by way of example only, and that many variations and modifications will be apparent to those skilled in the art without departing from the scope of the invention. For example, glue lines 16, 17 and 18 could be applied to the back panel, or both panels, and may be either solid or interrupted, and may be composed of either pressure activated, heat activated, or moisture activated glue or adhesive. Similarly, the glue or adhesive 19 could be moisture activated or pressure activated, and could be covered by a release paper removable imme-

diately prior to use. Envelopes employing the invention can obviously be of differing shapes and sizes, and, while conventional opaque paper normally used for envelopes of this type will generally be employed for one of the panels, other appropriate materials could be used if desired.

## Claims

1. A sealable envelope comprising a rectangular front panel 10 having top 11, bottom 12 and side 13, 14 edges formed of a first sheet of material, a rectangular back panel 20 having top 11a, bottom 12a and side 13a, 14a edges co-extensive with said front panel 10 and being formed of a second sheet of material, said front panel 10 and said back panel 20 being adhesively secured together along three 12,13,14 of said edges, and a closure flap 15 extending from the unsecured edge 11 of said front panel and having an adhesive bearing surface 16 facing said back panel whereby said closure flap 15 may be folded over the back panel along said unsecured edge 11 and adhesively secured to the back panel 20 to close said envelope, the material of at least one of said front and back panels 10,20 being translucent paper to permit visual inspection of the contents of the envelope when closed.

2. An envelope as claimed in Claim 1, wherein said back panel 20 is formed of translucent paper and wherein said front panel 10 is formed of opaque paper.

3. An envelope as claimed in Claim 1 or 2, wherein said translucent paper is receptive to conventional printing processes.

4. An envelope is claimed in anyone of Claims 1, 2 or 3, wherein said closure flap 15 is connected to said front panel along a line of perforations 11.

5. An envelope as claimed in any one of the preceding claims wherein opposite edges of said front 10 and back 20 panels are secured together by means of an interrupted line of adhesive 17, 18 whereas the third edges of said front and back panel are secured together by means of a solid line of adhesive 16.

6. An envelope as claimed in any one of the preceding claims wherein said closure flap 15 is connected to said front panel 10 along a first line of perforations 11, and said front and back panel each have a further line, of perforations 30,31 formed therein parallel with said first line of perforations 11, extending between opposite edges of said panels, and spaced slightly inboard of said solid line of adhesive 16 whereby to facilitate opening of said envelope.

7. An envelope as claimed in claim 6, wherein said further lines of perforations 30,31 are in alignment and co-extensive.

8. An envelope as claimed in Claim 6, wherein said further lines of perforations 30,31 are displaced whereby opening of said envelope by tearing along said further lines of perforation 30,31 will leave one of said panels projecting beyond the other.

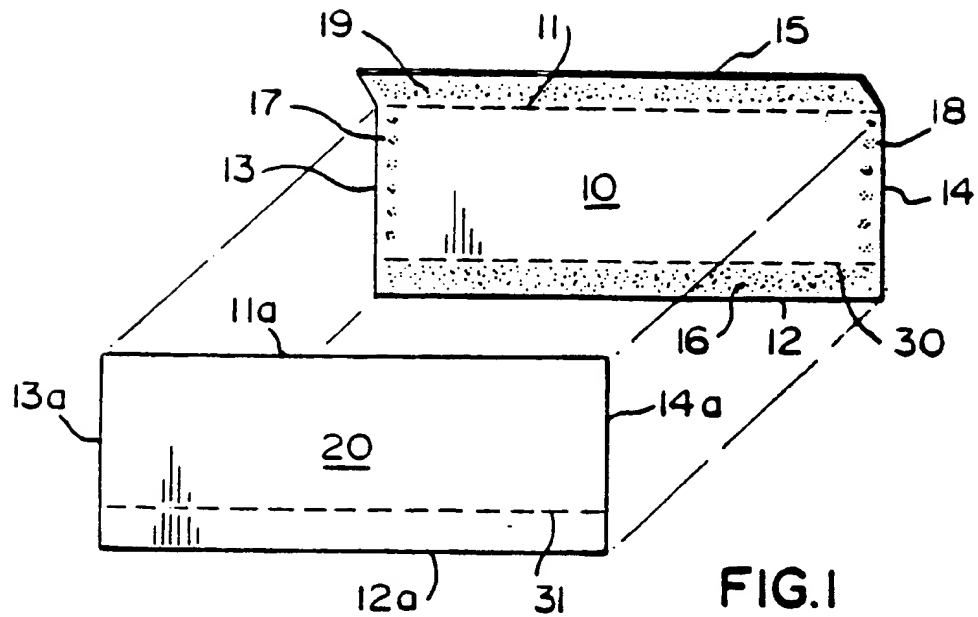


FIG. 1

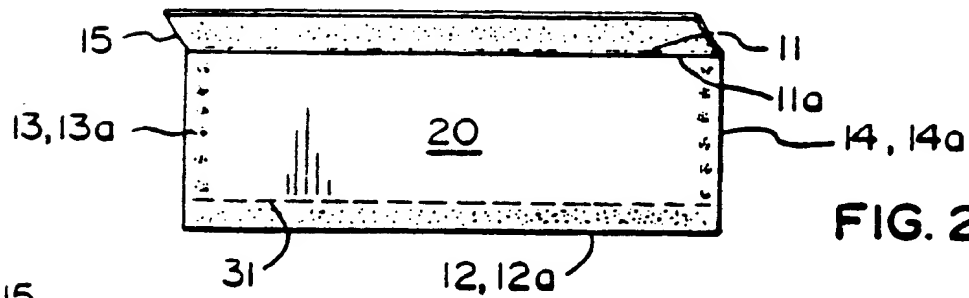


FIG. 2

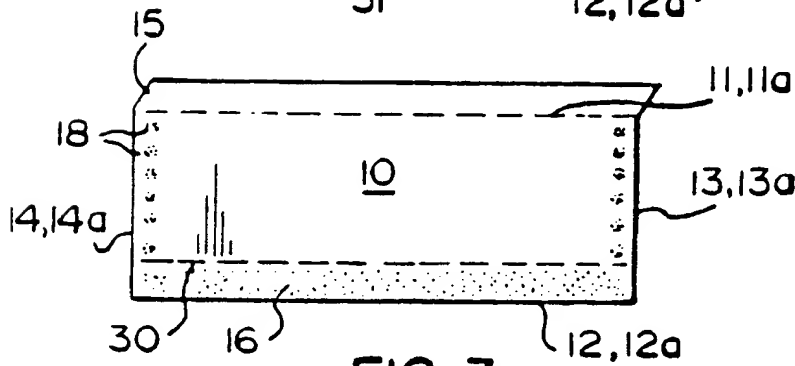


FIG. 3

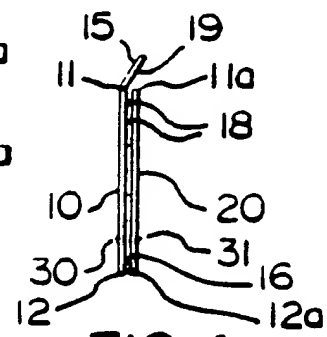


FIG. 4

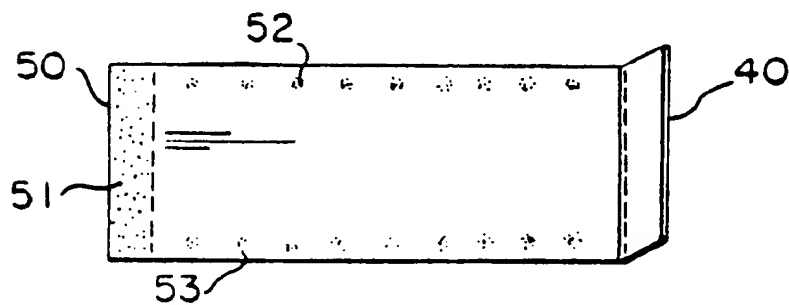


FIG. 5



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	DE-A-2 418 353 (LEMPER) * Claims 1,3,4; figure 1 * ---	1-4	B 65 D 27/04 B 65 D 27/14
X	GB-A- 345 441 (DELGADO) * Page 2, lines 9-18 * ---	1	
X	US-A-2 374 026 (McKEEN) * Page 1, lines 7-10 * ---	1	
X	DE-A-2 056 396 (HAAG AND SOHN) * Page 2, last line - pag 3, line 3; claims 1,2,5 * A	1 6	
A	---		
A	US-A-2 067 948 (POTDEVIN) * Page 1, line 31 * ---	5	
A	FR-A-2 083 172 (WOOD et al.) * Claim 1 * ---	1	
A	DE-A-1 918 880 (HECHENBERGER) -----		TECHNICAL FIELDS SEARCHED (Int. Cl.4)  B 65 D 27/00
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13-01-1989	Examiner HARBON J.L.
<b>CATEGORY OF CITED DOCUMENTS</b>  X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document  T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			